## Questions from the "Navigating the Last Mile: The Impact of Strong Health Systems" webinar!

Q: Thanks for these great reflections! Delivering to the last mile requires balancing efficiency/resource optimization with equity. I would love to hear panel reflections on how to balance supply/logistics for commodities for PHC facilities and for community health worker programs. How can community health worker (CHW) programs (like Zambia's Community Health Association) support better commodity availability at the last mile?

Nchobeni Luundu: The facilities place resupply orders based on the monthly consumption, which also accounts for commodities managed by the CHWs. Any increase observed in the community as a result of programs/activities that increase demand is reported to the facility by the CHW and the adjustment is made at the point of placing a resupply order. However, commodities are re-supplied as requested if available at the central level; if the commodity has low supply, it is rationed to ensure equity. In Zambia, a CHW logistics systems training curriculum was developed to strengthen the capacity of CHW in storage and management of PHC.

Commodity availability can be supported by:

- 1. Accurate and correct reporting of consumption/usage data
- 2. Sending incomplete reports in a timely manner

Q: What lessons have you learned working with the private sector, especially with administrative and reporting timelines? Also, what have been private sector actors' frustrations when working with government agencies?

Jef Imans: The private sector tends to thrive better in an environment with clear roles and responsibilities, and benefits from clear administrative and reporting timelines that are well adhered to. If these timelines are realistic and not unilaterally decided and imposed, and the client does their part of their roles and responsibilities, these timelines can and will in most cases be met. If they are not met, it is worth doing a root cause analysis, the client and service provider together, and defining both the issues and the solutions. In terms of frustrations, I think there are two main sources from the private sector when it comes to working with the government and its agencies: 1. A lack of clear roles and responsibilities along the various steps in the process and 2. Unreliable payment terms.

Nchobeni Luundu: For lessons learned working with the private sector on USAID's Global Health Supply Chain-Procurement and Supply Management project and on PASCO, we have had challenges with 3PL providers in terms of proof of delivery (POD) reconciliation and ensuring invoices provide the appropriate supporting documentation, leading to backlogs in payment. To resolve this, we engaged private sector providers to ensure a common understanding of administrative requirements. In addition, we conduct quarterly KPI reviews to promote continual improvement. For private sector frustrations with the public sector, we have experienced that there is a need to closely monitor truck loading times with the public sector (since this can represent a financial loss to vendors). There is also a need to always ensure both public and private sectors fully understand contractual terms so that there is clarity on the parameters for the operations.

Q: Does ZAMMSA have mechanisms to verify whether quantities of commodities dispatched to SDPs are actually received? Does the system flag discrepancies between what was dispatched and what was received?

Nchobeni Luundu: Yes, ZAMMSA is currently using a manual process to verify quantities dispatched vs quantities received through the use of the Delivery Note (DN). The DN is a proof of delivery that accompanies the commodities with data on each commodity and quantities dispatched. If the quantities received do not match the quantities dispatched, then the discrepancy is noted on the DN. The facility returns a copy of the DN and ZAMMSA will get a signed copy with the discrepancy highlighted. Corrective action is taken in response to the discrepancy. With support from partners, ZAMMSA will be using the Electronic Proof of Delivery (ePOD) hardware that can connect to ZAMMSA's existing DeliveryExpert infrastructure. This will streamline the process of POD submission and reconciliation and reduce loss through diversion.

Q: In cases of natural disasters, and bad roads that would otherwise hinder last mile delivery, can innovations like using drones provide alternatives and what economic value would that add to last mile?

Jef Imans: Drones have evolved in the last years to be now an alternative solution for last mile delivery, in terms of reliability, scalability, and cost, but will, in normal circumstances, be limited to either niche environments or requirements. The economic value is hard to determine, since on one hand the cost of a non-delivery (i.e. the opportunity cost) is hard to measure and depends on many factors, and on the other hand the true all-in cost of the more traditional ways of delivering commodities is often not fully understood or recognized. Having said that, if drone technology advances with the same speed as it has been doing the last 5 to 10 years, it is only a matter of time before drones will become a part of the normal portfolio of resources to use, both in emergency and humanitarian settings as in regular last mile distributions.

Q: If there is a low level of particular health commodities in a country can/should we still prioritize last mile delivery? Is there a critical mass for minimum supply levels to be able to focus our efforts on the community?

Jef Imans: There is for sure a critical mass for minimum supply levels needed in order to make the focus on and investment in the community and the last mile delivery mechanisms, although I am not aware of a universally accepted and/or validated one – probably every country/commodity combination would have to be looked at and investigated separately. Having said that, defining a low level in a country is not always as straightforward as it seems – a lack of clear reporting systems, the existence of parallel supply chains, and low maturity in and poor visibility on the end-to-end execution of deliveries can give the impression of a low or insufficient level of health commodities, even if there is in the country actually enough level available. In general, last mile should never be prioritized in a vacuum, but just seen as one of the links in the whole supply chain.